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Family Planning Digest

A publication of The Bureau of Community Health Services, Health Services Administration, Department of Health, Education and Welfare.

PPWP Population Convocation

Experts Agree 2% Growth Rate Is Too High, But Differ on Means to Slow Growth

With starvation rampant on several continents and malnourishment the norm in many countries of the world, the experts who participated in Planned Parenthood's International Convocation on the World Population Crisis in June generally agreed that the current two percent annual growth rate of the world's population strains the capacity of most governments to meet the basic needs of their people, and of the earth to produce the food and other resources essential to life. But there was no consensus at the New York meeting on *how* to slow population growth. Proposals ranged from redistributing the world's wealth among and within nations in order to abolish poverty, to withholding aid from those nations that failed to reduce their population growth. Both groups holding these polar positions maintained that family planning programs around the world have been unsuccessful or too slow in reducing population growth. More positive views of the importance of family planning programs were taken by leaders in government and private agencies with actual experience in making birth control services available to the poor. They showed that, where services were made readily available to the poor in both the United States and in developing countries, the most effective methods were adopted, fertility declined, sometimes more rapidly than among higher income women, the number of unwanted births dropped and lower birthrates resulted.

In developing world children represent security.

In his opening address before more than 1,000 persons who attended the Convocation, ecologist Barry Commoner, who is author of *The Closing Circle* and Director of Washington University's Center for the Biology of Natural Systems, declared that:

> The world population crisis . . . is the ultimate outcome of the exploitation of poor nations by rich ones . . . [and] ought to be remedied by returning to the poor countries enough of the wealth taken from them [during the colonial period] to give their people both the reason and the resources voluntarily to limit their own fertility.

It was his view that "the family planning approach, if applied as the exclusive solution to the [population] problem, would put the burden of remedying a fault created by . . . colonialism . . . on the individual victims of the evil." Redistribution of wealth, on the other hand, would result in an increased standard of living which, historically, has everywhere resulted in lowered birthrates.

Commoner admitted that his proposal "would involve exceedingly difficult economic, social and political problems," but said that alternative solutions, such as the withholding of aid or coercion to limit births, "are at least as difficult and socially stressful."

Differing sharply with Commoner, Garrett Hardin, professor of human ecology at the University of California (Santa Barbara),

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stated his conviction that mankind is gravely imperiled by increasingly limited resources and that population growth must be stopped "while there is a comfortable reserve of resources." Under what he called "reproductive laissez-faire," the demographic policy of a nation is determined by those unable or unwilling to make the 'right' reproductive decisions, leading to a quality of life devastating to human dignity. He declared U.S. aid efforts of the past 25 years a total failure since, in his view, they had failed to have a significant impact on population growth.

His prescription? The major ingredient is a get-tough policy of making foreign aid "contingent upon proof of increasing success in population control" since in the long run, he said, no other policy will be effective in "bringing the population of the world to ZPG at a level of environmental use that gives the descendants of all mankind a reasonable chance of living with some dignity." He concluded, "It is cruel to give aid to a poor country that has no growingly effective program of population control." He maintained that it was reasonable to apply the "lifeboat ethic" to the population issue: Only those should be admitted to the lifeboat who have a reasonable chance to survive. Those in the lifeboat should not imperil their survival by aiding those floundering in the water.

A quite different assessment of the consequences of making birth control services available and accessible to the poor and leaving reproductive decisions up to each couple was made in the luncheon address prepared for the Convocation by Caspar W. Weinberger, Secretary of Health, Education and Welfare. He noted that following passage of the Family Planning and Population Research Act in 1970, the federal government became actively engaged in support of organized family planning programs. The objective of the national program was not population control, but was rather to enable women to have the number of children they wanted and to reduce the high maternal and infant mortality rates common among the poor. The response of women to the program was enormous, the Secretary pointed out, and by 1973 organized programs were serving more than 3.2 million women, almost a fourfold increase from 1968; and almost three-quarters of them were from low-income families.

Program Impacts on Fertility

Weinberger pointed out that although fertility rates began to decline before the federal government initiative in family planning, they are now at an all time low. "How great an impact the federal program has had is impossible to estimate," he said, "but to say that a program so widely accepted as that of family planning has had no impact on fertility is plainly unrealistic." He described the program as "remarkably successful," and pointed out that it has been cost-effective as well, saving more than two dollars for every dollar spent. "I take pride," he said, "that these results have been achieved on a voluntary basis without violating the rights of the people to choose freely the dimensions of their own fertility.

The Secretary pointed out that the United States has played a "significant" role in helping to meet the population problems of other countries, by making contraceptives as well as the fruits of research available to them. He said that the United States would continue this commitment. The only population policy the U.S. government has, he maintained, is to make certain that "individual couples know that there is a choice about whether and when to have a family and that choice is for them to make."

He said the government is prepared to support efforts to "achieve practical breakthroughs toward simpler, longer-lasting means of birth control for men and women . . ." as well as research in the social sciences, so that "our knowledge of the population field can be increased and more precisely focused."

Weinberger concluded with the observation that "by bringing this research and work to fruition, the United States will have made a significant contribution toward progress in solution of world population growth. We will have done so with respect for the rights and opinions of others. . . ."

Rejecting the "doomsday scenario" of Hardin and the utopian program of Commoner, Frederick S. Jaffe, vice president of Planned Parenthood, described the premises underlying most of the effort in population programs sponsored by nations, private organizations and individuals. He said:

> Family planning programs are not viewed as substitutes for development programs but as intensifiers and accelerators of them. The programs are based on the premise that considerable unwanted fertility exists in every nation of the world; that efficient modern fertility control practices can be introduced and diffused at relatively low cost in advance of, or at the same time as, the fundamental social changes which have been the historic precursors of fertility limitation; that the result of such diffusion will be a more rapid reduction of unwanted fertility; and finally, that the more rapid reduction of fertility will itself help to accelerate social and economic development and to intensify the impact of whatever resources are made available for development.

Jaffe concluded:

> . . . the programs rest not on a base of *either* population *or* development, but of social actions to deal with both issues simultaneously, in a mutually reinforcing manner.

While those who are in a hurry to achieve ZPG immediately decry the efforts of developing countries to slow their population growth, Jaffe maintained that countries as divergent as China, Cuba, Colombia, Mexico, Tunisia, India and Pakistan have, through national programs, attempted to make voluntary fertility control available to their people and to create the conditions for "reproductive free choice." The programs in the developing countries had demonstrated, Jaffe said, that:

- It is possible to accelerate the diffusion and acceptance of modern means of fertility regulation through national programs, and more individuals will adopt these methods earlier and utilize them more consistently, than they would without the national programs;
- it is possible to disseminate information and education about modern contraception more quickly than without national programs; and
- it is possible, through such programs, "to accelerate the reduction of fertility, particularly if all methods (including abortion) are used and if the diffusion of fertility control services is accompanied by other reinforcing social changes."

He concluded that the "balance sheet for the national and international effort thus far shows a set of considerable achievements for a program which utilized but a minute fraction of funds available for development and which has never enjoyed high status and prestige." He urged higher national and international priority and resources to

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Editor: Lynn C. Landman
Assistant Editor: Marshall E. Schwartz
Copy Editor: Sheila S. Gluck

Editorial Offices, Center for Family Planning Program Development, 515 Madison Avenue, New York, N.Y. 10022.

Director of Publications: Richard Lincoln

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Pakistani women accept birth control aid.

strengthen, nurture and expand the family planning programs everywhere.

The Research Picture

Secretary Weinberger's comments about the need for continued contraceptive research to perfect existing methods and to develop new ones were explored at a panel on "The Control of Fertility and the Need for a New Contraceptive." Dr. Allan Barnes, vice president of the Rockefeller Foundation, explained that there are really only a few contraceptive methods currently available and each has a measurable failure rate and presents acceptability problems for some persons at risk. The challenge, he said, is to develop more methods suited to every level of motivation and to every variety of need. Clearly, he observed, "improved techniques will produce improved results."

Support is necessary for basic research into reproductive biology, he said, since there are vast areas needing elucidation, and for applied research as well. And even as family planning and development can go forward at the same time, so, he maintained, must both social science research and biomedical research be supported.

The physician noted the urgent need for a method that could be provided by nonclinicians, since physicians are extremely scarce in precisely those countries of the world where population growth rates are the highest and the need is the greatest. Although there are now 21 promising leads to be explored further, with some of them at the clinical testing stage, an "ideal" technique is not yet imminent and a lagtime of several years has to be anticipated.

Despite the limitations of current methods of contraception, these methods do make it possible for couples to plan their families, Dr. R. T. Ravenholt, Director of the Agency for International Development's (AID) Office of Population, emphasized. He said AID will continue to support family planning programs around the world by helping them diffuse current methods, such as the pill and condoms, more widely; by assisting them to make sterilization services generally available, with emphasis on outpatient techniques utilizing tubal clips, laparoscopy and minilaparotomy; by supporting research aimed at improvement of the IUD so that it is more comfortable, causes less bleeding, is rarely expelled and is virtually foolproof in preventing pregnancy. He concluded:

> The great task immediately before us is to rapidly make the most effective means of fertility control fully available throughout the developing world, where less than 20 percent have yet gained access to this great boon to their health, their economic and social development, and to their familial and social well being.

Sources

Papers and remarks presented at the International Convocation on the World Population Crisis, New York City, June 19-20, 1974:

B. Commoner, "The World Population Crisis—Is a Humane Solution Possible?";

G. Hardin, "Tying Foreign Aid to Population Control";

C. Weinberger, remarks at luncheon, June 20;

F. S. Jaffe, remarks at opening;

A. Barnes, remarks at panel, "The Control of Fertility and the Need for a New Contraceptive";

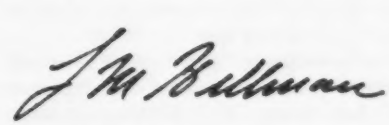
R. T. Ravenholt, "Fertility Control Technology —Current Status and Future Prospects."

DHEW Announces Digest to Cease Publication with January Issue

It is with the deepest regret that I must inform our readers that DHEW will cease publication of *Family Planning Digest* with the January 1975 number. The usefulness of this publication to American professional workers in the family planning field has been attested to by the fact that about 9,000 additional readers have requested subscriptions to *Digest* since we began publication in January 1972, and about 35,000 individuals are now receiving this publication. The painful decision to discontinue was made in conformance with the requirement by the Secretary of Health, Education and Welfare that *all* of the Department's publications must be sharply curtailed in this period when federal budgets are being tightened to the utmost.

I am informed that the kind of reportage which has been appearing in *Digest* will be carried in a new, expanded *Family Planning Perspectives* beginning in March 1975. (*Perspectives* is produced by the editorial staff of the Center for Family Planning Program Development, which has prepared *Digest* under contract to DHEW.) *Perspectives* is expected to include a "Digest" section with succinct, up-to-date news coverage of meetings, conferences and research from scientific journals such as has been appearing in *Digest* over the past three years. I am certain that *Digest* readers will want to continue to keep informed of the most important developments in our field, and I have requested the Center to let them know about plans for *Perspectives* and how they may receive the publication.

We at DHEW have been proud to sponsor this unique communications and education effort which has reported clearly and straightforwardly, in the best traditions of science journalism, the often complex findings of social, biomedical and operational research. I know that it has advanced understanding, and I feel sure, too, that it has helped improve the delivery of services to those in need.



Louis M. Hellman
Deputy Assistant Secretary for Population Affairs
Department of Health, Education and Welfare

Teenage Childbearing

Illegitimacy among White Teens Rising Again While Black Illegitimacy Continues to Decline

Rising rates of illegitimacy among teenagers during the 1960s were temporarily reversed after 1970, apparently due to increased availability of legal abortion. Recent California data suggest that nonmarital childbearing is on the increase again, however, among white teenagers, although black teenage illegitimacy rates continue to decline. These are among the conclusions reported by June Sklar, research demographer at the University of California at Berkeley, and Beth Berkov, health statistician with the California Department of Health, at the 1974 annual meeting of the Population Association of America.

The authors point out that, as more and more of the children who were born in the peak 'baby boom' years of the late 1950s enter the early reproductive ages, teenage patterns of fertility and family formation increasingly influence population trends in the United States as a whole. These teenage patterns have undergone several important changes since World War II, according to Sklar and Berkov:

- Between the end of World War II and the early 1960s, the historical trend to early and teenage marriage continued and intensified, with a concomitant trend toward earlier childbearing within marriage.
- At the same time, "illegitimate childbearing among teenagers was relatively minimal."
- Beginning in the 1960s, the incidence of teenage marriage and teenage childbearing within marriage declined, while the incidence of teenage childbearing outside of marriage rose.
- By the late 1960s, this pattern of nonmarital childbearing by teenagers had reached the point where nearly 30 percent of births to teenagers were occurring outside of marriage.
- Due apparently in large measure to the increased availability of legal abortion, illegitimacy rates among teenagers in 1971 began to take a downward turn.
- More recent data from California, however, suggest that teenage illegitimacy rates among whites again have begun to rise; while those of blacks continue to decline, albeit at a reduced rate.

The investigators' data come from varied sources — published federal marriage and birth data through 1969, birthrate estimates by legitimacy status from 1965 through 1971 derived from individual state data and the most current data on marriage, birth and abortion from California.

While early marriage has long been more common in the United States than in Western Europe, the authors report, this trend accelerated in the postwar years. From 1900 through 1940, about 12 percent of 15-19-year-old girls had ever been married, but this increased to 17.1 percent in 1950, and dropped only slightly to 16.1 percent in 1960. But by 1970, this was down to prewar levels, at 11.9 percent. This sharp decline in the last decade was marked by the fact that, for the first time, a smaller proportion of nonwhite teenage girls than of white teenagers had ever been married (11.3 percent vs. 12.0 percent in 1970, compared with 19.0 percent and 10.9 percent in 1940).

The average interval between marriage and first birth paralleled the trend toward early marriage: As the tendency toward early marriage increased, the proportion of women having their first child within 18 months of marriage also rose, peaking at 61.4 percent for white women who first married under age 22 in 1955-1959. But the next five-year period, which saw the start of the downward trend in teenage marriage, also saw the first downturn in early births since 1940.

This combination of later marriage and postponement of births resulted in a decline in teenage marital fertility in the 1960s. The marital birthrate for white teenagers rose in 1969 and 1970, however — the only age and racial group of women to show increased marital fertility between 1965 and 1970, the authors observed. Because marital fertility among nonwhite teenagers declined more rapidly and more consistently during the decade, the fertility rate differential between whites and nonwhites was narrowed. While the rate for nonwhite teenagers was 35 percent higher than for whites in 1965, it was only 15 percent greater in 1971.

The trends in illegitimate fertility were somewhat different, however. For both white and nonwhite teenagers, illegitimate fertility rates rose consistently from 1965 to 1970, and then fell in 1971. (For whites, the rate was 11.8 per 1,000 unmarried women aged 15-19 in 1970 and 10.7 in 1971; for nonwhites, the rates were 91.0 and 90.3, respectively, for the two years).

This decline, the authors note, was concentrated in states with liberalized abortion laws with the decline greater in states with the highest rates of legal abortion use. For all races, the nonmarital birthrate among 15-19-year-olds fell from 24.7 in 1970 to 22.2 in 1971 per 1,000 unmarried women in the 15 states which had enacted abortion reform laws. It rose from 22.6 to 22.7 in all other states. For example, in California and New York, where legal abortion rates were among the highest in the country in 1970, teenage illegitimacy declined by about 15 percent between 1970 and 1971 (from 24.0 to 20.4 for California, and from 22.4 to 19.0 for New York). In the relatively low abortion use states of Virginia and North Carolina, the comparable declines were four and five percent. In Arkansas and South Carolina, where legal abortion rates were the lowest of the states where abortion laws were liberalized, teenage illegitimacy *rose* between 1970 and 1971 (from 28.8 to 29.4 for Arkansas, and from 36.3 to 37.4 for South Carolina).

"With abortion laws liberalized in 15 states in the period affecting 1971 births," observe Sklar and Berkov, "it was possible to obtain a legal abortion by traveling to another state. However, a number of constraints — such as ignorance of the legality of abortion in other states and the expense of travel to a state where abortion was legal, coupled with the costs of and concerns about abortion itself — limited the widespread use of migratory abortion. Poor and nonwhite women in general, especially if they were teenagers, probably suffered most from these constraints and thus were unlikely to have resorted to abortion in very great numbers unless it was legal and readily available in their state of residence or very nearby."

Data from California suggest that the decline in teenage illegitimate fertility was less

Teenagers taking part in a rap session in a San Francisco family planning clinic.

rapid for blacks and was reversed for whites in 1972 and 1973, with teenage illegitimacy remaining at relatively high levels. Thus, the authors estimate that, in California in 1973, more than one-fourth of babies born to white teenagers and nearly three-fourths of those born to black teens were illegitimate (up from 16.7 percent and 53.2 percent, respectively, in 1966).

"The persistence of out-of-wedlock childbearing at relatively high levels has been accompanied by an increasing tendency among young unmarried mothers to keep their babies," the investigators note. "The number of babies adopted by nonrelatives . . . in California between 1967-1968 and 1971-1972" fell from 11,257 to 5,807.

Source

J. Sklar and B. Berkov, "Teenage Family Formation in Postwar America," paper presented at the annual meeting of the Population Association of America, New York City, April 18-20, 1974.

Savings in Averted Births

Federal Investment in Family Planning Results in $2 Saved for Each $1 Spent

Federal expenditures to support family planning programs for low-income women produce savings to the government of at least two dollars each year for every dollar spent in the previous year, according to an estimate by Frederick S. Jaffe, director of the Center for Family Planning Program Development, the Technical Assistance Division of Planned Parenthood-World Population, in *Studies in Family Planning*. The savings include only monies that would have been spent by the federal government for medical and welfare services within a year of its outlay for family planning services, but which were not expended because of the unwanted births averted by family planning programs.

Estimates of long-term benefit-cost ratios have generated estimates of up to $100 saved for each dollar spent on family planning in developing nations and $26 saved for each dollar spent in U.S. family planning programs. But such analyses, Jaffe stated, have been criticized because they do not take into account the extent to which a child, during his productive years, pays back the cost of his birth and upbringing. In addition, short-term savings are more important to government officials, who "typically function in a limited time-frame bound, on the one side, by the length of terms of office, and on the other, by a planning process and methodology in which five years is considered the distant future."

Jaffe points to three principal areas in which short-term costs can be saved by averting unwanted births:

- *Medical care*, including expenses for pregnancy and birth, postpartum care and care of the infant during its first year of life. For low-income women (90 percent of those served by federally funded family planning programs are from low- or marginal-income families), "a significant part of these costs is currently borne by federal, state, and local government through Medicaid, special health projects, and tax-supported hospitals and health centers."
- *Public assistance*, which would be required for children born to women already receiving welfare payments.
- *Opportunity costs* of "income lost to the mother because of the need to give up employment during pregnancy and the early child rearing period." These are reflected in reduced family income and may, thereby, increase the family's reliance on government-supported services.

Not included in the analysis are costs for women (and their families) who go on welfare because of the birth of an additional child, nor "such medium- and long-term costs as education, further dependency, housing, health, care of the mentally retarded, police and other public services."

To calculate how many births have been averted by public programs, Jaffe used previous estimates of the number of woman-years of contraception required to avert one unwanted birth, which range from seven to 10 woman-years per birth. Based on the number of women enrolled in federally funded family planning programs during 1966-1971, the number of births averted was, therefore, between 614,000 and 874,000. During this period, an estimated $174 million was spent on family planning.

The medical costs include costs for normal delivery and ambulatory care, plus allowances for cesarean section (in five percent of births), complications (at the rate of 17 hospital days per 100 deliveries), prematurity (nine percent of births, at 16 days of hospitalization per infant), congenital abnormalities (one percent, at five days' hospitalization), fetal loss (17.4 percent of cases) and admissions for acute illness during the first year of life (15 percent of births). Weighted for the fact that two-thirds of births to low-income mothers occur in city and county hospitals, and one-third are financed by Medicaid in voluntary hospitals, the average cost per pregnancy is $971. Using national data on government support of certain types of medical care, hospital admissions and physician caseload, Jaffe estimates that, on the average, the government would pay for 62 percent of the hospital costs for these women ($437), and 25 percent of physician's costs ($67). This amounts to $504, slightly over half the average cost of $971 per birth.

Welfare costs were simpler to estimate: The average cost of cash payments, social services, administrative costs and food stamps per person on public assistance is $799 a year. In 1971, 16 percent of patients enrolled in organized family planning programs were welfare recipients — and therefore 16 percent of the averted births would have been to welfare recipients. Thus, the average welfare cost saved per birth averted is $128.

Based on national labor statistics, Jaffe calculates an average "opportunity cost" — income that a woman would have to forego as a result of her pregnancy — of $1,044 per birth. But since "there are no data available to determine how much of these opportunity costs are borne by government in the form of increased expenditures for public assistance, day care, social, health and housing services, and how much is borne by the individual and her family," these costs are excluded from the computations of costs associated with unwanted births. The result, he said, is to understate the savings accruing from their prevention.

With these exclusions, the remaining average saving for each birth averted is figured at $632 (medical cost plus welfare cost). For the lower estimate of 614,000 averted births, this amounts to a saving of $368 million; for the higher estimate of 874,000 averted births, the total saving is $524 million. Since the government spent an estimated $174 million on family planning during this period, this comes to a saving in short-term costs of between $1.80 and $2.50 for every dollar spent.

"There are few public programs in the United States — and possibly none — that have the potential of saving a minimum of two dollars in government expenditures in Year 2 for every dollar expended in Year 1," Jaffe comments. "These savings are in addition to the long-term savings, and the health, social and demographic benefits to government and individuals, from the prevention of unwanted births. The government resources saved as a result of family planning programs would in principle be freed to finance other urgent health and social needs in the year following the program expenditure."

Source

F. S. Jaffe, "Short-Term Costs and Benefits of United States Family Planning Programs," *Studies in Family Planning*, 5:98, 1974.

Resources in Review

By Dorothy L. Millstone

Perhaps the most flexible curriculum guide to family life education available is the California Youth Authority's loose-leaf volume, *Family Life Education Curriculum Guide* (8½" x 11", 217 pp.), published in January 1974 for use with institutionalized delinquents. For the teachers of its literally captive audience, the Authority has prepared an educational model, techniques for implementing the model, and bibliographic materials markedly freer in approach than can be found in materials for those involved with noninstitutional settings.

The guide's format was dictated by the nature of the students. A high percentage of the girls and a significant but lower proportion of the boys are committed for sex-related offenses; 25 percent of the girls have out-of-wedlock children; the majority of the girls are sexually experienced; 65 percent of the girls and 57 percent of the boys come from broken homes.

Unlike more conventional education, the goal was birth control-oriented and this is clearly stated [p. 3]: "to provide a program which would enable wards to develop the ability to make rational choices regarding the timing, spacing and number of children in accordance with their personal beliefs and desires." The long-term objective is to help these young people and their children by reducing maternal and infant mortality and morbidity and by breaking the poverty-ill-health-poverty cycle. Institutional education and clinic services (either in institutions or in the community) are the program's basic components. The *Curriculum Guide* under review here implements that program.

The model stresses the peer group as a primary factor in shaping attitudes and values. A discussion group replaces the formal classroom as the locus for teaching. Student questions form the core of the curriculum. The teacher is one part of the circle, a listener, facilitator and resource. Here, where young people are really not free, everyone is free to say anything or ask any question; no one is compelled to say anything and confidentiality is guaranteed for everything discussed in class.

The teaching model is presented as a suggestion rather than as a must. Adaptation is recommended. Its three main areas are self-concepts, physical development and sexual behavior. Conception and contraception are grouped with the physiology section, as would be expected, along with the menstrual cycle and hormonal changes at puberty.

Many teaching techniques adaptable to any classroom are presented in careful detail. Ninety-two frequently asked questions on key topics are listed and the appendix provides some suggested but not necessarily final answers. (Some of the family planning answers could easily be improved.) Single-question activities permitting a student to reply anonymously without fear of showing ignorance are suggested. Encouraging students to express themselves nonverbally, by means of drawing, is another technique explored. Even graffiti, confined to a large drawing board, are invited. Starters are suggested, such as "A foxy chick . . . " and students are asked to continue. Photo exhibits are proposed and text tells how to get the pictures and how to use them. Role-playing is spelled out so its practical use is clear.

This guide differs from others, not only because of its flexibility but because it is a supplement to works in the field of family life education and is not a substitute for them.

The volume costs $5.20 plus five percent tax. Order by title from the State of California, Documents Section, P.O. Box 20191, Sacramento, Calif. 95820.

A Classroom Text

A teaching tool adaptable to sex education programs is *Aspects of Human Sexuality* (6" x 9", 81 pp., 1973), a college-level paperback textbook, part of a health science series. Robert Kaplan, an Ohio State University teacher, is both the author of this one and the consulting editor of the series. For this text he has borrowed the idiom of the student-originated sex and birth control books that have become so stylish on campus. Wit, informality and slang are used to convey and make interesting and acceptable much of traditional health education course material. Despite its unorthodox packaging, much that would have been in the text even if it weren't written informally is still there (physiology and statistics, for example). But its packaging is a plus. Poetry is occasionally introduced to gain special attention for the text to follow. Each chapter ends with questions pointing back to highlights that wit and slang may have blurred. Readings are suggested and more than a few are titles already popular among young readers.

All in all, this is an interesting example of a teacher who listened hard to what students were saying and then talked back to them in their language in his textbook. The chapter on contraceptives is commendably brief and informative; its section on the pill earns approval by preparing the reader well to recognize possible danger signals. Secondary schools and youth-serving agencies might not want to use it the same way as colleges will, but teachers and group leaders might find it very handy.

Price: $1.50, order from your bookseller or from Wm. C. Brown Company, 2460 Kerper Blvd., Dubuque, Iowa 52001.

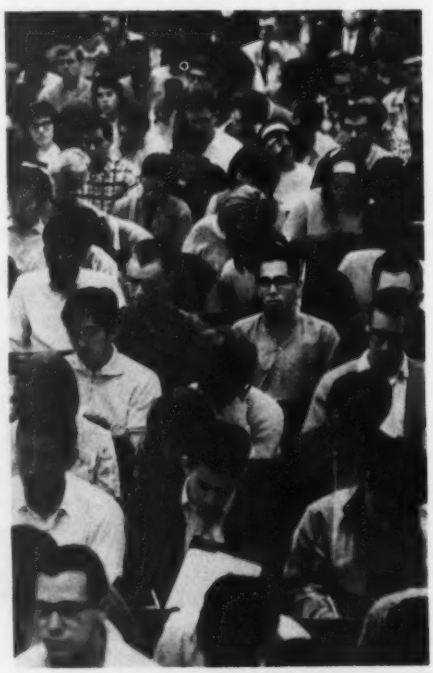
Doctors' Reading Recommendations

With so many sex education books and pamphlets flooding the market, how do you choose those best for teenagers? The American Academy of Pediatrics has come up with an answer — a bibliography prepared by its regional New York Chapter Committee on Youth, published and approved by the Academy. *Selected References on Low Cost Sex Education Publications for Teen-Age Youths* (5½" x 8½", 16 pp.) was designed to meet the needs particularly of junior and senior high school students, but items recommended for preteens and young adults are also included.

An advantage of this bibliography is its selectivity; only 34 items are listed. Reproductive physiology, pubertal and adolescent growth, birth control, dating and venereal disease are among major subject areas. Providers are listed along with addresses and prices, and a usage index keys each item for recommended age of readers. Ratings are assigned, based on the findings of committee members and, where opinion diverged widely, this is indicated.

The index is not easy to use but the bibliography is so short and the comments so clear that the material is easily assimilated.

This is of interest as it is; it is of special interest as an Academy of Pediatrics publication. Copies cost 50 cents each. Order from the Academy's Department of Publications, 1801 Hinman Ave., Evanston, Ill. 60204.



A Training Guide

Schools of nursing, hospitals and family planning agencies offering special training for nurses will find much of value in the *Family Planning Procedure Manual for Nurse-Midwives, 1974,* published by the Downstate Medical Center, Department of Obstetrics and Gynecology.

The procedures used in the Center's postpartum family planning clinic are set forth by the Department's midwives and physicians. Their presentation shows the benefit of years of teaching and practical clinic experience from which it was distilled. Step-by-step procedures are briefly and clearly outlined in the 151-page, 8½" x 11" paperback manual. Anatomical diagrams define the text explicitly. A detailed subject index permits rapid location of particular information. This is *not* a manual directed to training paramedical personnel. It is a text to be used *by* professionals *with* professionals. Its sharp focus accounts, in large part, for its clarity.

Material covered includes: principles and practice of interviewing for family planning; procedure for breast examination; how to fit a vaginal diaphragm; use of oral and other hormonal contraceptives; IUD insertion, principles and techniques; procedures for IUD removals; side effects and problems associated with IUDs; handling revisits; and pregnancy and gynecological conditions for diagnosis and management in family planning.

The appendix adds vital information on such practical matters as equipment for a small family planning clinic, preparation for a clinic session and sterilization of equipment, use of an appointment book and tickler file, classification of pap smears and patient instruction sheets.

Downstate has used these procedures to train U.S. and foreign nurse-midwives and midwives in family planning over the years. A generous spirit motivated publication of the manual which states, on its inside cover, that all or part may be quoted, reproduced or translated without permission.

The manual is available in English, French and Spanish for $2.50. Make checks payable to The Research Foundation, State University of New York. Mail orders to: Mrs. Elaine Pendleton, Department of Obstetrics and Gynecology, Downstate Medical Center, 450 Clarkson Ave., Box 24, Brooklyn, N.Y. 11203.

Teaching Tools

Medical illustrations adaptable to teaching male and female sterilization, conception, sexual functions, contraception and abortion techniques are now available from Planned Parenthood of Sacramento, California. The set of five 12" x 12" drawings includes the female reproductive organs; these organs with tubal ligation; the male reproductive organs; these organs with vasectomy; and normal female genitalia.

The drawings, all on board paper, cost $1.50 each if ordered singly. A set costs $6.95. A brochure depicting the illustrations may be obtained free of charge. To obtain the brochure or to place an order, write Planned Parenthood Association of Sacramento, 1507 21st St., Sacramento, Calif. 95814.

Interagency Newsletter

From the California Interagency Council on Family Planning comes a newsletter that councils in other states might want to see. This eight-page (8½" x 11") printed quarterly culls the periodicals of affiliated organizations as well as publications centered in affiliates' spheres of interest and publishes items of salient concern. Agencies get the benefit of keen-eyed screening. Material is discriminatingly selected and printed without comment. Occasionally an original article points up opportunities. A recent issue reported how a volunteer program for San Mateo prison inmates had been taken over by prison medical staff; gave the facts about health manpower pilot training projects and how to use them; listed the highlights of a conference on preventing pregnancy among adolescents, and announced new California legislation and tax policies.

For a free sample write the Council, 1760 Solano Ave., Room 200, Berkeley, Calif. 94707. Those who wish to subscribe may be added to the permanent list free of charge.

New Aid for the Professional

Contraceptive technology has changed greatly in the past decade. Hundreds of investigators have studied aspects of these changes and the benefits and risks related to them. The studies have enriched scientific knowledge but their proliferation has been so great that family planners may be overwhelmed by the richness of research and left in some doubt about final conclusions.

A new guide offers an overview which family planning professionals — doctors and nurses in particular but some others as well — will find a handy resource in this connection.

"Current Concepts in Contraception," which comprises one section in a recent issue of the quarterly, *Clinical Obstetrics and Gynecology* (Vol. 17, No. 1, March 1974), assembles in nine chapters the findings of distinguished authorities on a wide variety of basic issues. Dr. Daniel R. Mishell, Jr., who served as editor of the section, assembled and assessed the latest findings on contraceptive steroids and intrauterine devices, and concluded that they represent the methods of choice for most women, although traditional methods may be more desirable for some.

Reviewing the condom, diaphragm and vaginal foam, Dr. Gerald S. Bernstein laments that some family planning workers have played down these contraceptives "to the point where patients have failed to use them in an emergency situation out of lack of confidence. . . ." [p. 31]

The guide also contains articles on metabolic effects of orals, by Dr. William N. Spellacy; on thromboembolism, cancer and oral contraceptives, by Dr. Martin P. Vessey; on the relationship of pelvic infection to various types of contraception, by Dr. William P. Ledger; on copper-bearing intrauterine devices, by Dr. Howard J. Tatum; on statistical evaluation of contraceptive methods, by Dr. Christopher Tietze and Sarah Lewit; on current concepts in female sterilization, by Dr. Robert Israel, and on new approaches to contraception, by Sheldon J. Segal. Dr. Mishell has a limited number of reprints of his chapter and will make them available on a first-come, first-served basis. One free copy may be obtained by writing him at 1321 N. Mission Rd., Los Angeles, Calif. 90033. He will refer requests for reprints of the other chapters to their authors.

About Rhythm

If rhythm or periodic abstinence could be made uniformly effective in preventing pregnancies, this could revolutionize modern family planning. From time to time, news stories announce new discoveries indicating that rhythm's scientific basis has been established. What weight should be attached to these reports? What is the present state of knowledge concerning this method?

Natural Family Planning (5½" x 8½"), published in 1973 by the Human Life Foundation, is a 341-page paperback book dealing with these questions. It contains the proceedings of a 1972 conference sponsored by the Foundation and the Center for Population Research of the National Institute of Child Health and Human Development.

Among the researchers from many countries who reported on studies were Dr. and Mrs. John J. Billings of Melbourne, Australia, whose reports of the discovery of a distinguishing pattern in cervical mucus secretions were widely publicized in this country. Neither the Billings' findings nor others point to a quick solution to rhythm's problems. Collectively, the papers show that much research is going on and more is needed. Much of what is needed is identified.

The book costs $5.00. To order, write the Human Life Foundation, 1776 K St., N.W., Washington, D.C. 20006.

New PPNYC Teen Program

2-Year, $4 Million Program to Help Teenagers Avert Unwanted Pregnancies

Planned Parenthood of New York City (PPNYC) has launched a two-year, $4 million program to make birth control services, counseling and information available to about 140,000 teenage girls who are estimated to be at risk of unwanted pregnancy. Alfred F. Moran, PPNYC executive vice president, in announcing the new program, pointed out that 30,000 New York teenage girls became pregnant in 1972. Of these, 10,000 had out-of-wedlock children and 14,000 terminated their pregnancies with legal abortions. "If venereal disease is considered epidemic among teenagers in New York," he commented, "then pregnacy is pandemic," noting that the pregnancy rate among teenagers is eight times higher than the reported VD rate. Moran estimated that more than half of the teenage girls in the city will be sexually active before they are 20. Another aim of the program is to increase public awareness of the problems and acceptance of services for teenagers, and to involve other agencies and private physicians in providing services to teenagers.

Services will be available on a walk-in basis at all of the five clinics the agency operates in New York City, with information and counseling also available at four to eight neighborhood field offices to be opened as part of the program. Another major aspect of the teenage project includes "Facts by Phone," which provides telephone information, counseling and referral to teenagers for medical service. The telephone service will be advertised widely on radio and through mass transit posters. Condoms are also being made available at cost — 10 cents each — at all PPNYC facilities, to increase the involvement of male teenagers and as an anti-VD measure.

The agency will add staff and expand its hours of clinic operation to serve the expected increase in teenage patients. Of 46,000 patients served by PPNYC in 1973, 24 percent (more than 11,000) were 19 years old or younger, and 15 percent were under 18. A survey of 476 new adolescent patients made earlier in the year revealed that a majority (56 percent) of the teenagers served by PPNYC were seeking crisis-type services, pregnancy detection and abortion, rather than preventive care such as contraception. Some 16 percent of these girls had already been pregnant.

These figures are "a stunning indication that we are failing to reach youngsters with the information and services they need to prevent first pregnancies," Moran declared. Several parts of the program are aimed at educating and informing teenagers about birth control methods and services. Heavy use of public service time and special programs on radio are planned, and several local stations with large teenage audiences have expressed their willingness to cooperate in these efforts. The "Facts by Phone" service will operate during afternoon and evening hours during the school year and will be publicized through radio announcements. The agency also plans to increase its work within the school system, helping schools to furnish information, counseling, referral for medical services when appropriate, teacher training and educational programs for parents. Training for staffs of community service agencies that serve teens also will be expanded.

Basic educational materials, for both teens and parents, will be provided and will include booklets on the specific male as well as female methods of contraception, on VD, cervical, uterine and breast cancer, minor gynecological ailments and a guide for parents on how to discuss sex and contraception with their teenage children.

PPNYC has had no legal problems in the past in serving teenagers, Moran said. [In New York State, the age of majority is 18. The right of persons under 18 who are married, emancipated or parents to consent for their own medical care is affirmed by state law. So is the right of a minor of 16 or older to purchase contraceptives. In New York City, the municipal hospitals permit minors of 17 or older to consent for their own abortions. A comprehensive state family planning law provides that needy persons be advised periodically that voluntary family planning services are available to them at public expense. The statute contains no restrictions as to age, or requirements of parental consent; and the New York State Department of Welfare has issued regulations under the statute providing that "family planning services shall be made available without regard to the recipient's marital status, age or parenthood."] Moran maintained that it may be illegal *not* to provide such services, since Title IV-A of the Social Security Act currently mandates that birth control services be provided for teenagers from families receiving public assistance and, therefore, not providing such services to other teens could be considered discriminatory. The belief that access to contraception promotes promiscuity is a myth, he added. "The fact is the lack of access to contraception increases unwanted pregnancies." A Los Angeles study suggests that seeking contraceptive services, as a rule, follows initiation of sexual intercourse. [See: "Contraceptive Education for All Teens, and Services on Request Favored by Most Adults," *Digest*, Vol. 2, No. 5, 1973, p. 4.]

While most of the clinics are located in low-income areas of New York City, the services will be available to all teenagers. Teenagers from low-income families, Moran noted, usually have no other source of such services available, and for them "pregnancy is the ticket of admission to good medical care." Those teens from Medicaid-eligible families can use Medicaid to pay for their services, while others will be able to use deferred payment plans, although no one will be denied services because of inability to pay. The bulk of the $4 million cost of the program is provided by foundation grants.

Sources

A. Moran, comments at press conference, Planned Parenthood of New York City, July 22, 1974.

J. Cahn, "PPNYC Adolescent Services Survey," 1974 (unpublished).

Copper T IUD

Embedding Common But Not Harmful

Embedding of the arms of the Copper T into the endometrium (uterine wall) is a common and probably beneficial occurrence, according to one report presented at the annual meeting of the Association of Planned Parenthood Physicians. Cervical and uterine perforations with the device are less common and are not beneficial. However, a change in the construction of the T device and a variation in insertion technique may help reduce the frequency of perforations, other investigators reported.

Evidence of embedding was found in hysterograms (a specialized form of x-ray of the uterus) of 18 of 48 women selected at random from more than 900 women in whom various versions of the Copper T had been inserted at the Family Planning Clinic of New York University-Bellevue Medical Center, Drs. Masood A. Khatamee and Hans Lehfeldt reported. The embedding of one or both arms of the T in the endometrium has been previously reported, they said. "No problem was encountered in the removal of such devices either by us or by other investigators." Not only is the embedding apparently harmless, they maintained, but it also may reduce expulsions "because an embedded device is anchored more firmly." Dr. Howard J. Tatum of The Population Council, developer of the T, told *Digest* that he agrees that embedding is probably a desirable effect.

However, evidence of cervical perforation by the vertical portion of the T was seen in the hysterograms of six of the 48 women. The perforations occurred early in the series, the investigators noted, when a certain type of inserter (since abandoned) was being used. The cases were "asymptomatic," ex-

cept that the device "was felt by the husband during . . . intercourse." A group of investigators from the Medical University of South Carolina, led by Dr. H. Oliver Williamson, reported that they found six cervical perforations in 3,016 women using Copper Ts; while researchers from New York Hospital-Cornell Medical Center found two such perforations in 939 insertions, according to a report presented at the last annual meeting of the American Fertility Society.

While such perforations are not "clinically significant," Dr. Tatum told *Digest,* they mean the device is out of position and therefore the risk of pregnancy is increased. A modified T, with an enlarged, ball-shaped tip is now being tested. "This change may reduce the likelihood of downward displacement and cervical perforation," he reported in an article in *Clinical Obstetrics and Gynecology.*

There were also six cases of deep penetration into the myometrium (smooth muscle) of the uterine fundus (the area above the openings to the fallopian tubes) by one or both arms of the T in the series of 48 hysterograms, all in parous women, none of whom showed any symptoms of perforation. Dr. Lehfeldt told *Digest* that the clinical significance of these penetrations was as yet unknown, "because the patients are completely asymptomatic. It might even be something good, by helping on retention."

While efforts are being made to eliminate certain problems with the Copper T, other work has been directed at designing Copper Ts that have a longer expected life-span than the TCu-200 (which contains 200 square mm of copper wire wound around the stem). Tests have begun with one version, the TCu 220C, which is designed to last 15 years. The TCu-200 was originally designed to "provide effective contraception for four years," according to Dr. Tatum, but "in order to be ultraconservative, a two-year period of use was recommended." There are now some preliminary indications, however, that the TCu-200 may be effective for even longer than the original goal of four years. [The Copper 7, with an equal surface area of copper, was approved by the FDA for two years of use.]

Dr. Jaime Zipper of Santiago, who pioneered the application of copper to IUDs, commented that he has examined TCu-200s removed from "four or five women" after four years of use, and found "something really astonishing. . . . At least half the wire" was still present, without breaking. "I think perhaps the copper can last 10 years," he said. "I think the amount of copper that is lost in the third, fourth and fifth years is extremely small." Dr. Lippes noted that there are "a couple of thousand patients now well into their third year" of use of the TCu-200 in Buffalo "without increasing the pregnancy rate on the Copper T." And Dr. Tatum noted that "in all probability," a woman using the TCu-200 "will have continued effective contraceptive action through the third year."

Sources

Papers and remarks presented at annual meeting of the Association of Planned Parenthood Physicians, Memphis, Tenn., April 16-17, 1974:

M. A. Khatamee and H. Lehfeldt, "Hysterographic Studies in Women Wearing Copper-T Devices," and H. Lehfeldt, personal communication;

J. Lippes, remarks at session, Intrauterine Devices;

H. J. Tatum, remarks at session, Intrauterine Devices;

H. O. Williamson, H. L. Bank and B. T. Kirkland, "Tatum T: Experience with 3,000 Patients"; and

J. Zipper, remarks at session, Intrauterine Devices.

Other Sources

H. J. Tatum, "Copper-Bearing Intrauterine Devices," *Clinical Obstetrics and Gynecology,* 17:93, 1974, and personal communication.

New IUD in Trials

Ypsilon-Y Avoids Uterine Perforations

A new intrauterine device, developed in an effort to design an IUD which will not perforate the uterus, has been effective in preliminary trials with nulliparous women, Dr. Samuel Soichet of The New York Hospital-Cornell Medical Center reported at the annual meeting of the American Association of Planned Parenthood Physicians. In more than 6,000 insertions of the device, the Ypsilon-Y, in both nulliparae and multiparae in New York City, Brazil and Thailand, there have been no uterine perforations, Dr. Soichet said.

The Ypsilon is a Y-shaped device, consisting of a stainless steel frame in the shape of a V, covered with inert silicone rubber. The bottom half of the V is covered with a web, and the two arms of the V each end with flattened silicone balls. The tail, which extends from the bottom of the V and produces the Y shape, is also made of silicone. Originally, the stem contained a metal wire, but this was found to increase bleeding and pain, and so was removed from later versions of the IUD. The tips of the V are supposed to set themselves in the uterine cornua (the hornlike segments where the fallopian tubes enter the uterus).

In 224 insertions in nulliparae at The New York Hospital, covering 3,046 woman-months (with at least six months' follow-up for each woman), the Ypsilon had equal or marginally lower rates for pregnancy, expulsion and removal for bleeding and pain than the Copper T-200 (TCu-200) in trials at the same institution, according to a report by other New York Hospital investigators presented at the annual meeting of the American Fertility Society (see Table 1). Experience with multiparae, however, indicates that the pregnancy rate was markedly higher than in nulliparae (2.4 vs. 0.8 pregnancies per 100 woman-years of use) while expulsion and removal rates were slightly lower, Dr. Soichet noted. Therefore, a larger version of the Ypsilon (which also has a web extended further up the V) is being tested in multiparae in an attempt to reduce the pregnancy rate. The current small-sized device, which will be marketed by Syntex, will be for use primarily with nulliparous women.

Table 1. Event rates per 100 woman-years of use for the Ypsilon-Y and TCu-200 in nulliparous women at The New York Hospital

Event	*Ypsilon-Y*	*TCu-200*
Insertions	224	197
Woman-months of use	3,046	2,943
Rates (per 100 woman-years)		
Pregnancy	0.8	0.8
Expulsion	2.4	2.5
Displaced and reinserted	1.2	2.0
Medical removals		
Bleeding/pain	3.5	4.5
Perforation	0.0	0.4
Other	1.2	0.8
Nonmedical removals		
Planned pregnancy	0.0	1.2
Other personal	2.0	0.4
Total event rate	11.1	12.7
Continuation rate	88.9	87.3

Sources: S. Soichet, W. Rodrigues and L. L. Cederqvist, "Experience with a Modified Small Size Ypsilon," Table 1(C), paper presented at annual meeting of the Association of Planned Parenthood Physicians, Memphis, Tenn., April 16-17, 1974; and N. H. Lauersen, L. L. Cederqvist, S. Donovan and F. Fuchs, "Comparison of Three IUCDs: The Antigon-F, the Ypsilon and the Copper T-200," Table III, paper presented at annual meeting of the American Fertility Society, Hollywood, Fla., April 4-6, 1974.

Sources

S. Soichet, L. L. Cederqvist and W. Rodrigues, "Experience with a Modified Small Size Ypsilon," paper presented at annual meeting of the Association of Planned Parenthood Physicians, Memphis, Tenn., April 16-17, 1974.

N. H. Lauersen, L. L. Cederqvist, S. Donovan and F. Fuchs, "Comparison of Three IUCDs: The Antigon-F, the Ypsilon and the Copper T-200," paper presented at annual meeting of the American Fertility Society, Hollywood, Fla., April 6, 1974.

Credits

P. 1: WHO/Almasy; p. 3: Population Council; p. 4: D. Macmillen, courtesy Planned Parenthood/Alameda-San Francisco; p. 6: K. Heyman; p. 11: R. Burri, Magnum; p. 12: R. Lincoln; p. 15: H. Garcia, courtesy Searle & Co.

10-Year Study

Children Unwanted at Conception Appear to Have More Ills, Social Problems

Recent data suggest that children unwanted at conception tend to have a higher incidence of illness and hospitalization, somewhat poorer grades in school and "worse integration in their peer group" than other children. The data come from preliminary results of a ten-year study of 200 children born to women who twice requested and were denied abortion and an equal number of matched controls in Prague, Czechoslovakia. These effects are more pronounced in boys than in girls, according to a report from Zdenek Dytrych of the Psychiatric Research Institute in Prague, who headed a team of Czech and American researchers. The report was presented at the annual meeting of the Population Association of America. The continuing cross-cultural research project is supported by the Czechoslovak State Research Plan and the World Health Organization, among others.

The 110 boys and 110 girls studied included all but 13 children born to women living in Prague who had abortion requests twice denied during 1961-1963, and who were still living in Prague when the study was conducted in 1971. An equal number of controls were matched with the subject group for grade in school, sex, birth order, number of siblings, mother's marital status (fewer than five percent of the children were born out of wedlock), and father's occupation.

Data on all the children and their mothers were gathered from hospital and school records; interviews with the children, their mothers and teachers; intelligence tests given to the children; assorted psychological tests given to both mothers and children; and rating scales, evaluating behavior and attitudes, completed by interviewing psychiatrists and social workers, and the children's classmates and teachers.

Before delivery, the attitude of mothers in the subject group toward their pregnancy "was evidently worse" than that of the mothers in the control group. Those in the abortion group "registered at later dates [for prenatal care] and came for checkups less regularly and less frequently than controls," the data showed. On the other hand, "the pregnancies and deliveries [from the medical point of view] do not show any marked differences between the two groups."

There were no significant differences in birth weight and size. Similar proportions of children in the subject and control groups had started walking and speaking in their first year. "In general, it can be said that as far as the biological start in life is concerned, both groups are on a par," the investigators noted.

While there were "no important differences in physical development" between the two groups, there were differences in the frequency of illness. "The health service outpatient clinic has records of all childhood diseases which required a visit to a physician or the visit of a physician to the family," the researchers reported. "The differences between the two groups are statistically significant and are unfavorable for the [subject] group. A similar situation exists in the number of hospitalizations and the number of accidents," they found.

The birth of the children to the mothers who were denied abortions "significantly more often" brought about a "negative or neutral" change for the family, while the control mothers said the birth represented a positive change for the family. "In subsequent life, however, these differences seem to disappear," the authors observed. "When the mothers assess the development of their relationship to the child and their satisfaction with the child at present, the differences become insignificant."

Children Found to Be "Naughtier"

During the preschool years, the children in the subject group "were significantly naughtier" on the average than the controls, according to assessments made by the mothers. At the time of the study, the children in the subject group "more often manifest extremes" in their intrafamily relationships, both positive and negative. "Their emotional status within the family seems to be, generally speaking, less in equilibrium than in the case [of the control group]," the authors noted.

In school, the marks of these children were "somewhat worse" than those of the controls in all subjects. But both groups apparently had the same capabilities, as they obtained similar results on the intelligence test given all the subjects. The proportion of retarded children was the same in both groups.

The differences among the groups of children show up more clearly when boys and girls are analyzed separately. The boys in the subject group were "acutely or chronically ill more often" than the boys in the control group or either group of girls, and were also hospitalized more often. The girls in the subject group were breast-fed for shorter periods of time than the control girls, and a significantly smaller proportion of them than of the controls showed a weight increase at their first physical checkup. As for school marks, the difference apparent when both sexes are taken together can be seen to be concentrated among the boys from the subject group, who have "consistently (if not statistically significantly) lower grades in all subjects" than the control boys. This, however, is not true for the girls. When evaluated by their classmates, the boys in the subject group "are considered by the other children in the class more often [than controls] as less reasonable and bright. At the same time, they are more often thought to be 'courageous' (in this case, probably courage to make a spectacle of oneself and to act provocatively), and they were more often rejected as friends." Again, this was not the case for the girls.

"We can thus conclude," the investigators state, "that while the biological start in life was more or less the same when boys and girls are compared, in items which reflect a less positive influence of the family environment there are a number of differences which are unfavorable for boys" who were unwanted at conception.

While the differences between the subject and control groups are "not dramatic, they are nevertheless clear." The greater incidence of illness, poorer school grades and poorer integration into their peer group all point "to a higher risk situation. This does not, of course, concern only risks for the child and its family but . . . for society as a whole." The boys particularly "find themselves in a vicious circle of interaction where the expectations of parents are repeatedly frustrated, which in turn leads to reactions on the part of the child, which then increase maladaptive behavior. If such interaction continues . . . we [may] expect certain forms of behavior to appear as permanent personal traits of the child, which may increase chances for maladaptive behavior in adolescence and later life.

"If we sum up all the differences . . . , we can find one common denominator. In our opinion this common denominator existing among unwanted children, especially boys, is an increased defensive position against stress and frustration."

The investigators stressed that the negative developments observed among the experimental group were "well within the bounds of social viability" and that there had been no breakdowns or conflicts requiring psychiatric attention. It is not true, the study showed, that a child unwanted during pregnancy remains unwanted; nor is it true "that the birth of a child causes a complete change in attitude and that every woman who becomes a mother will love her child. . . ." What the study does show, they maintained, is that "the child is born into a situation which *may* handicap it."

Source

Z. Dytrych, Z. Matejcek, H. P. David and H. L. Friedman, "Children Born to Women Denied Abortion: Initial Findings of a Matched Control Study in Prague, Czechoslovakia," paper presented at the annual meeting of the Population Association of America, New York City, April 18, 1974.

Family Planning

Fewer than 20% of U.S. Colleges Provide Services for Their Students

Most sexually active college students are still unable to obtain contraception through official college channels since fewer than 20 percent of U.S. colleges and universities provide family planning services for their students, according to a survey of nearly 3,000 institutions made by the National Center for Health Statistics (NCHS). The schools that offered such services were most likely to be tax-supported, coeducational institutions offering advanced degrees and with enrollments of more than 10,000 students, according to survey authors Gloria Hollis and Karen Lashman of the NCHS.

Questionnaires were sent in the spring of 1973 to 2,984 schools (all the institutions listed in the Directory of the U.S. Office of Education with the exception of Roman Catholic seminaries). If no reply was received in three weeks, a second letter was sent. A total of 2,753 colleges and universities — 92.3 percent of those schools surveyed — returned questionnaires. A total of 578 institutions (19.4 percent) said they provided birth control services; 972 (32.6 percent) said they referred students to other sources for family planning services; and 1,203 (40.3 percent) neither provided services nor referred students elsewhere. The remaining 7.7 percent did not respond.

The proportion of schools offering such services rose steadily with enrollment, as Table 1 shows. Services were provided by only 5.4 percent of schools with enrollments of fewer than 200 students and rose to 14.2 percent of those with 500-999 students. Just over 50 percent of schools with 10,000-19,999 students provided family planning services, rising to 71.2 percent of the institutions with 20,000 or more students. Thus, the proportion of students enrolled in schools that provided services is larger than the proportion of schools that do so.

Coed colleges were more likely to provide family planning services than single-sex schools: 20.1 percent of the coed schools (which included more than 90 percent of all schools surveyed) offered such services, compared with 14.5 percent of all-female schools and 6.5 percent of all-male schools. Some 23.2 percent of the publicly supported institutions (which made up nearly half of those surveyed) provided services, compared with 20.2 percent of the independent private schools, and 11.6 percent of the private colleges affiliated with a religious denomination.

More than one-third (33.9 percent) of the 946 institutions granting advanced degrees provided birth control services to their students, nearly double the 17.3 percent of the 875 schools which grant only undergraduate degrees. Just 9.2 percent of schools with programs of less than four years provided family planning services.

Colleges in the Far West were most likely to provide family planning services, while those in the Southeast and Southwest were least likely to offer these services.

The authors noted that "one possible explanation for the 1,203 institutions which do not provide family planning services is . . . that some do not have any health unit and others have health units . . . not operationally suited to providing family planning services." They reported that an estimated 30 percent of institutions of higher learning may be in that position.

The survey did not ask whether the services were restricted in any way — i.e., whether they were available only to married students, or whether unmarried students, both minors and those who had reached legal majority, were permitted to use the services. Two earlier — and much smaller — surveys by the American College Health Association (ACHA) addressed those questions, the authors noted. In the 1966 survey, questionnaires were sent to 458 ACHA member institutions from whom 321 usable responses were received. Of these schools, fewer than half (44.5 percent) said oral contraceptives were prescribed for contraceptive purposes for married students, while only about four percent prescribed the pill for unmarried coeds who had attained majority or for unmarried minors. The 1970 survey was sent to 555 ACHA members, from whom 278 usable replies were received, and 2,003 nonmembers, who returned 235 usable responses. Oral contraceptives were prescribed at 55 percent of the ACHA-member schools and 28 percent of the non-ACHA colleges. Forty-two percent of the responding ACHA members and 17 percent of the nonmembers reported that unmarried students who had attained majority could get the pill, while 35 percent of ACHA schools and 12 percent of nonmembers said unmarried minors could obtain a prescription for oral contraceptives. [For further information, see: "PPWP, ACHA Sponsor Survey of U.S. College Birth Control Services," *Digest*, Vol. 1, No. 4, 1972, p. 12.]

Despite increased public and private support for family planning services throughout the country, "it appears that one large segment of American society in need of birth control services has been largely overlooked — the college community," the authors of the present survey commented. "While the concept of family planning has been recognized as an essential component of standard health care in both its physiological and psychological aspects, it is not universally included as a component of college student health clinics. This is especially critical when viewed in light of the fact that married students currently comprise one-fourth of the total college population according to the 1970 census. . . ." The authors also pointed out that "the single university student cannot be overlooked either" since many are sexually active. They concluded, "The social responsibility of college officials demands that they no longer ignore the realities of this sexually active population, but rather assure the accessibility of a wide variety of birth control methods to their students which respond to their varied economic and medical conditions and which are consonant with their religious beliefs and personal preferences."

Table 1. Colleges and universities offering birth control services to students, by enrollment

Enrollment	*Number of schools*	*Number offering services*	*Percent offering services*
Total	**2,984**	**578**	**19.4**
<200	276	15	5.4
200-499	418	31	7.4
500-999	613	87	14.2
1,000-2,499	753	137	18.2
2,500-4,999	355	80	22.5
5,000-9,999	275	93	33.8
10,000-19,999	157	79	50.3
≥20,000	66	47	71.2
Unknown	71	9	12.7

Source: G. Hollis and K. Lashman, "Availability of Family Planning Services in Colleges and Universities," paper presented at 1973 annual meeting of the American Statistical Association, New York City, Dec. 27-30, 1973.

Source

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Sex Predetermination

Ability to Determine Child's Sex Would Have No Lasting Effect on Ratio of Boys to Girls

The ability of a couple to predetermine the sex of a child apparently would have no long-term effect on the ratio of males to females born in the United States, report Charles F. Westoff of the Office of Population Research at Princeton University, and Ronald R. Rindfuss of the Center for Demography and Ecology of the University of Wisconsin. Aside from some initial fluctuations in the ratio of boys to girls "which would eventually damp out," the only significant change the availability of sex-control technology would cause would be a marked increase "in the probability of the firstborn being a male, and the second child being a female," they observe in an article in *Science*. Even these effects would be diluted, the authors point out, since about half of those surveyed opposed the use of sex-control technology.

Their conclusions are based on the responses of 5,981 currently married women sampled in the 1970 National Fertility Study to questions on the composition of their "ideal" family, and on their preference for the sex of their next child. Overall, the "ideal" sex ratio (number of boys per 100 girls) for ideal families was 110, but there was a sharp difference between women who wanted an even number of children and those who wanted an odd number. "The sex preference ratios for women who considered two or four children ideal were 106 and 104 respectively," the authors observed, "whereas women who considered three children ideal had a sex preference ratio of 125." Therefore, data on ideal family composition was not used extensively in the analysis because they combined the effects of number preference and sex preference.

Boy First Is Preferred

The desired sex ratio for the next child was somewhat different. Overall, the ratio was 104, "indistinguishable from the current sex ratio at birth of 105." For women who intended having more children in the future, however, the ratio was 124 — 102 for women who already had children and 189 for childless women. Thus, the only group expressing a strong preference for a boy as the next child was merely displaying a preference for a boy as the first child. When sex preference was examined by parity, the trend for a balance between boys and girls could be seen:

- Women with one child overwhelmingly wanted their next child to be of the opposite sex — 78 percent of women with a girl wanted a boy next, and 79 percent of women with a boy wanted a girl next.
- Women with one boy and one girl were almost equally divided on preference for a third child, with 51 percent wanting a boy and 49 percent preferring a girl. But 85 percent of those with two boys wanted a girl next, and 84 percent of those with two girls wanted their third child to be a boy.
- Similarly, among women with three children, 81 percent of those with more boys than girls wanted a girl next, and the same proportion of women with more girls wanted a boy next. The only slight departure from these patterns was shown by women with five or more children: 55 percent of those with equal numbers of boys and girls wanted a boy next.

This "striking" indication of a desire for a balanced number of boys and girls implies that "apart from the transitional period, sex-control technology would have very little effect on the sex ratio at birth (assuming, of course, that current preferences remain stable)." In the transitional period, when the technology first becomes available, the sex preference ratio of 124 for women who intend to have more children would apply. This would mean "nearly a 20 percent 'excess' of male births in the transitional period," because of the desire of childless women for the firstborn to be a boy.

Balance Is Desired

This preference for a male firstborn (and, because of the desire for balance, the preference for a female as the second child if the first was a boy) appears to be "the most lasting implication of the introduction of sex-control technologies. . . . Whatever characteristics are associated with being firstborn would thus be concentrated among males," Westoff and Rindfuss observe. "Social-psychological literature suggests that firstborn are more susceptible to social pressure and more likely to achieve (educationally and economically) than subsequent children." A recent study in the Netherlands indicates that firstborns — at least among males — tend to score higher on intelligence tests than later-born children, for each family size. [See: "First Borns Show Higher Test Results," *Digest*, Vol. 3, No. 2, 1974, p. 11.] The authors also note that sex-control technology could "facilitate the marriage market by increasing the probability that a given individual would have a friend of the same sex with a sibling of the appropriate sex and age for marriage."

But the question remains as to whether or not couples would use such technology even if it were generally available. When asked their reaction to "being able to choose the sex of the child," the women in the sample showed "some preponderance of negative reactions: 46.7 percent against, 38.8 percent in favor, and 14.6 percent neutral." Further analysis of the responses showed "a slight tendency for women with children of one sex only to be more in favor of such a development than women with children of both sexes; those with the same number of boys and girls are the least in favor of having such control." This response suggests that such technology "may only be selectively used," the authors note. "Moreover, if the considerable incidence of unplanned births in the United States . . . were to continue, the effects of sex preselection technology would be further diluted."

Source

C. F. Westoff and R. R. Rindfuss, "Sex Preselection in the United States: Some Implications," *Science*, **184**:633, 1974.

Fertility Behavior

'Baby Boom' and 'Baby Bust' Related to Shift in Timing of Marriage and Childbearing

The 'baby boom' after World War II and the 'baby bust' which followed — with current period fertility rates at or below replacement level — are not contradictory phenomena, but are merely symptoms of a transition from one pattern of fertility behavior to another, according to Arthur A. Campbell, deputy director of the Center for Population Research of the National Institute of Child Health and Human Development. The transition from a period when late marriage and late fertility were the norm to one of earlier marriage and childbearing resulted in the 'boom', he explained in his presidential address at the annual meeting of the Population Association of America.

His conclusions are based on a study of 18 developed countries (in northern and western Europe, North America, Australia and New Zealand) with populations of two million or more which showed a certain pattern in fertility rates: a long postwar rise in fertility well above the low levels of the 1930s, generally followed by a decline in fertility beginning in the late 1960s.

In the years following World War II, through the early 1950s, the fertility rate rose uniformly for both younger and older women. The earlier cohorts had entered their childbearing years during the 1930s, "when fertility rates at the younger ages were very low." Their high fertility later in life can, to some extent, "be interpreted as compensating for low fertility at the younger ages," Campbell explained. During the remainder of the 1950s and the early 1960s, fertility rates for younger women continued to rise rapidly, but the increase slowed for older women. Thus, between the 1930s and the peak of the 'baby boom' in the early 1960s, the total contribution to the fertility rate made by women under age 25 increased by 93 percent, while the contribution from older women rose by only 28 percent. "The net result was a considerable downward shift in the ages at which women gave birth," Campbell noted. In addition, "these changes were accompanied by steep increases in the proportions of women married at the younger ages" — from 30 percent married before age 25 in the 1930s to 51 percent in the 1960s.

The shift to an earlier start in childbearing produced high fertility rates for a time because fertility rates for older women stayed at or above their previous levels during this transition, while rates for younger women rose sharply. When fertility rates for women 25 and older began to fall in the 1960s, (marking the completion of the shift from later to earlier childbearing), today's record low fertility rates resulted. In the 17 countries for which 1971 or 1972 data are available, the total fertility rate fell to 2.3 per woman from 3.1 in the early 1960s, Campbell said (2.1, the replacement level, was the average rate for these countries during the 1930s). "All of these countries still have fertility rates at the younger ages that are well above the rates observed in the 1930s (the average excess over the 1930s is 59 percent)," he noted, "and most of them (13 out of 17) have rates at the later ages that are below the lowest levels observed in the 1930s."

These changes in total fertility rates (as measured for given periods of time) can be quite deceiving, Campbell added. This rate measures the number of children a woman would have during her life if she conformed to the fertility behavior of women of all ages during the year in question (i.e., had the same fertility pattern as 20-year-olds during year X when she was 20, the same pattern as 30-year-olds in year X when she was 30, etc., including all the intervening ages). But since these age-specific rates keep changing from year to year, there is no cohort which, during its reproductive life, conforms to the pattern for any one year.

Therefore, while these yearly rates can be quite high throughout the reproductive years of any one cohort, the completed fertility of the cohort can be far below all the annual total fertility rates during its reproductive career — if rates for younger women were low when the women in the cohort were young, and rates for older women were low when the cohort was older. The reverse can also be true.

Thus, Campbell notes, while the total fertility rate in the United States rose by 85 percent between 1936 and 1957, "the rise in the completed fertility rate between the cohorts of 1911-1915 and 1931-1935 will be only about 40 percent." This relationship, also seen in other developed countries for which data are available, "establishes the finding that the postwar elevation of period fertility rates was influenced to a major degree by changes in the age patterns of childbearing," he concluded.

One other consequence of these observations is a refutation of "the generalization, 'earlier means more', that was at one time dangerously close to being accepted as part of the conventional wisdom of demography." While the current patterns of fertility show childbearing beginning earlier than in previous years, the completed fertility rates will be lower by the time the women reach age 50. "Regardless of how much earlier childbearing may be associated with higher completed fertility in cross-sectional studies, such studies are not necessarily associated in time or in international comparisons," Campbell added.

These trends in fertility from the 1930s through the 1970s "suggest that couples now respond to varying social and economic conditions more by changing the ages at which they marry and have children than by changing the total number of children that they have."

Source

A. A. Campbell, "Beyond the Demographic Transition," presidential address presented at the annual meeting of the Population Association of America, New York City, April 19, 1974.

ACOG on Pregnancy-Related Disability

Although pregnancy is a physiological process, "all pregnant patients have a variable degree of disability . . . during which time they are unable to perform their usual activities. . . . The onset, termination and cause of the disability can only be determined by a physician," according to a policy statement adopted by the Executive Committee of the American College of Obstetricians and Gynecologists (ACOG) in March. Normal pregnancy and even complications of pregnancy have usually been excluded from disability insurance policies in the past. [See: "Full Coverage Urged for Maternity Care," *Digest*, Vol. 3, No. 1, 1974, p. 14.] In its model law proposed in 1973, ACOG urged that complete maternity care coverage be included in all health insurance policies. The new ACOG position points out that:

> in an uncomplicated pregnancy, disability occurs near the termination of pregnancy, during labor, delivery and the puerperium. The process of labor and puerperium is disabling in itself [and] the usual duration of such disability is approximately six to eight weeks.

The statement then points out that complications such as toxemia, infection, hemorrhage, ectopic pregnancy and abortion can give rise to other disabilities.

A separate problem occurs with women who have a preexisting disease which "in itself is not disabling," but becomes a disabling condition "with the addition of pregnancy. Certain patients with heart disease, diabetes, hypertensive cardiovascular disease, renal disease and other systemic conditions may become disabled during their pregnancy because of the adverse effect pregnancy has upon these conditions. The onset, termination and cause of the disability as related to pregnancy can only be determined by a physician," the statement concludes.

Source

Executive Committee, American College of Obstetricians and Gynecologists, "Statement re Disabilities Associated with Pregnancy," March 1974.

Pill and Hypertension

Normal Users Run 7 Times Risk of Nonusers; Among Hypertensives, Users' Pressure Down

A recent study confirms and quantifies the increased risk that healthy women may run of developing hypertension with oral contraceptive use; while another study suggests that for women who already have hypertension, the pill may actually bring their blood pressure down.

A preliminary report from the Kaiser Permanente Contraceptive Drug Study indicates that pill users have nearly seven times the likelihood of developing hypertension as women who never took the pill, and nearly six times the risk as former pill users. That is, when followed for a period averaging 19 months, 6.2 per 1,000 pill users, compared to 1.1 former pill users and 0.9 never-users, developed hypertensive disease.

The association between pill use and increased blood pressure had previously been reported by other investigators from Kaiser, by Britain's Royal College of General Practitioners and others. [See: "8-Year Prospective Study of 23,000 Users Finds Serious Risks Few, Benefits Great," *Digest*, Vol. 3, No. 5, 1974, p. 1; and "Slight Blood Pressure Rise Now Confirmed," *Digest*, Vol. 2, No. 5, 1973, p. 13.] Because of this relationship, existing sustained elevation of blood pressure has been generally considered to contraindicate prescription of the pill.

However, Drs. William N. Spellacy and S. A. Birk of the University of Florida at Gainesville reported on a study showing that 51 of 59 hypertensive women registered a decrease in their formerly elevated diastolic blood pressure after taking oral contraceptives for six months while only eight of them registered an increase. The decrease was particularly pronounced for women who took the progestogen-only 'minipill'. A control group of 19 hypertensive women who wore IUDs for the same time period showed no consistent blood pressure change.

The Kaiser study is supported by DHEW's Center for Population Research of the National Institute of Child Health and Human Development. The findings are based on data gathered during multiphasic health screening of 11,672 women born in 1925 or later who were members of the Kaiser Foundation Health Plan in the Walnut Creek, California, area. The group studied included 3,851 current oral contraceptive users, 4,252 former users and 3,569 never-users.

Since current users tended to be somewhat younger than the never-users and former users, all data were standardized for age. Between December 1968, when the study began, and December 1971, about 15 percent of each group (after age standardization) were lost to follow-up. The average length of observation was almost identical for the three groups — slightly more than 19 months for each woman. The average number of multiphasic exams was also the same for all groups.

When the number of newly diagnosed cases of hypertension was analyzed by age and pill status, the rates for current users were higher at every age level except for the age group under 25 than those for never-users, according to the report by Dr. Savitri Ramcharan, Dr. Frederick A. Pellegrin and Elizabeth Hoag.

[Based on the age-adjusted rates of 6.2 new cases of hypertension per 1,000 current pill users, 1.1 per 1,000 former users and 0.9 per 1,000 never-users diagnosed during the observation period, an approximate incidence rate can be calculated using the mean length of observation, 1.6 years. The approximate rates are 385 new cases of hypertension per 100,000 pill users per year, 56 cases annually per 100,000 never-users and 69 cases per 100,000 former users.] Data are being processed to produce a true incidence rate, calculated on the basis of person-years of observation. However, the investigators indicate that since "the period of follow-up was less than three years, the incidence rate based on length of follow-up is not expected to be very different from the estimates provided in [the] report." (Even these incidence rates, however, would not necessarily apply to the entire U.S. population, since the study population is largely white and middle class, and hypertension is much less prevalent among this group than among blacks and poor persons.)

Possible Bias Examined

The possibility of a bias in diagnosing hypertension from one group to the other was also examined, and the investigators found similar ranges and mean readings for both systolic and diastolic pressure in the three groups. The effects of predisposing factors, sequential vs. combined pills, duration of pill use, and estrogen and progestogen dosage remain to be examined, the investigators said.

The recent study on the safety of oral contraceptives by Britain's Royal College of General Practitioners found that the development of hypertension was related to the progestogen dosage, with higher incidence rates accompanying higher doses. In contrast to this finding, Spellacy and Birk report that use of progestogen-only minipills is associated with substantial reductions in blood pressure in most hypertensive women using them, while combination pills are associated with smaller reductions.

The investigators studied 78 volunteers from the Jackson Memorial Hospital family planning clinic in Miami. All were diagnosed as having high blood pressure, with diastolic pressure — the minimum blood pressure as the heart fills with blood—greater than 90. (Diastolic pressure was used to diagnose hypertension because systolic pressure — the maximum pressure, when the ventricles contract — is more susceptible to temporary fluctuations caused by emotion.) Thirty-three women chose a combined oral contraceptive (with one mg of ethynodiol diacetate and 100 mcg of mestranol); 19 chose an IUD (these women became the control group); 14 chose a minipill with 250 mcg of ethynodiol diacetate; and 12 opted for one with 75 mcg of norgestrel.

In the control (IUD) group, there was "no significant change in either the systolic or diastolic blood pressure." On the other hand, "the oral contraceptive groups demonstrated significant decreases in diastolic blood pressure with therapy" over the 12-month follow-up period. "This was most pronounced in the norgestrel group," where the average diastolic pressure declined from 92 to 77. In the ethynodiol diacetate group, the average diastolic pressure declined from 96 to 84 at six months, but rose to 91 at 12 months. Among the women taking the combined pill the diastolic pressure declined from 97 to 90. In the IUD group, the average diastolic reading fell from 97 to 93.

All 12 women taking norgestrel showed a drop in diastolic pressure, as did 12 of the 14 women using ethynodiol diacetate (the two others showing an increase). Twenty-seven of the 33 women using the combined pill had a drop in diastolic pressure; the remainder showed an increase.

The investigators note that there had been few previous reports of the effects of oral contraception on blood pressure in women with existing hypertension "since they are usually excluded from therapy." The authors state that "although the number of women [they] studied was small and the duration of treatment was short," their data "suggest that essential hypertension is not an absolute contraindication to the use of steroid contraceptives and, indeed, the use of progestogen contraceptives may be the ideal child-spacing fertility control method for these women."

Sources

S. Ramcharan, F. A. Pellegrin and E. Hoag, "The Occurrence and Course of Hypertensive Disease in Users and Nonusers of Oral Contraceptive Drugs," in M. J. and M. S. Fregly, eds., *Oral Contraceptives and High Blood Pressure*, Dolphin Press, Gainesville, Fla., 1974.

W. N. Spellacy and S. A. Birk, "The Effects of Mechanical and Steroid Contraceptive Methods on Blood Pressure in Hypertensive Women," *Fertility and Sterility*, **25**:467, 1974.

Royal College of General Practitioners, *Oral Contraceptives and Health*, Pitman Medical, London, 1974.

Pill and Liver Tumors

Rare Benign Tumors Seem Linked with Pill; But 'Lancet' Sees Need for More Evidence

Fourteen cases of benign liver tumors (hepatic adenomas) in women taking oral contraceptives have recently been reported by physicians in the United States and England. The tumors contained large numbers of blood vessels and produced serious hemorrhages in several cases — four of which led to death.

These reports do not establish a causal relationship between pill use and development of the tumors. As an editorial in the *British Medical Journal* observed:

> The link between benign liver tumors and oral contraceptives cannot be regarded as proved, . . . until their actual incidence in women of childbearing age has been determined, and it would be unwise to jump hastily to conclusions based on anecdotal evidence, however persuasive. Furthermore, the prevalence must be very low in relation to the millions of women in the world who are taking the pill, though now that more attention is being drawn to the existence of a possible association it is likely that more cases will be recognized.

The first seven cases were reported in *The Lancet* by physicians in Ann Arbor, Michigan. The doctors observed that while such tumors are rare, all seven cases seen in their area in the last five years occurred in women using the pill. The women ranged in age from 25 to 39, and had been using oral contraceptives for from six months to seven years (although only one woman had been on the pill for less than a year). One woman died from a massive hemorrhage. Four other individual cases were reported from elsewhere in the United States and Canada, in women ranging in age from 28 to 37, three of whom died. Three additional cases were reported in the *British Medical Journal*, in women 34-51 years old, none of whom died. In 10 of the 14 cases, the women presented with abdominal pain, and in three cases the symptom was an abdominal mass. In one instance, the tumor was discovered by chance during a gallstone operation.

Changes in liver cells in women using oral contraceptives have been observed in the past, but the alterations were not considered serious. Although these several cases indicate a possible association between benign liver tumors and the pill, "such a relationship clearly cannot be regarded as proven," observed *The Lancet*. But the reports "should encourage a careful search for neoplastic liver nodules in necropsies and in living patients and a critical assessment of any connection between such tumors and steroid hormones."

Sources

J. K. Baum, J. J. Bookstein, F. Holtz and E. W. Klein, "Possible Association Between Benign Hepatomas and Oral Contraceptives," *The Lancet*, **2**:926, 1973.

D. L. Contostalvos, "Benign Hepatomas and Oral Contraceptives," *The Lancet*, **2**:1200, 1973.

E. Horvath, K. Kovacs and R. C. Ross, "Benign Hepatoma in a Young Woman on Contraceptive Steroids," *The Lancet*, **1**:357, 1974.

D. R. Kelso, "Benign Hepatoma and Oral Contraceptives," *The Lancet*, **1**:315, 1974.

W. A. Knapp and B. H. Ruebner, "Hepatomas and Oral Contraceptives," *The Lancet*, **1**:270, 1974.

"Liver Tumours and Steriod Hormones," *The Lancet*, **2**:1481, 1973.

"Liver Tumours and the Pill," *British Medical Journal*, **3**:3, 1974.

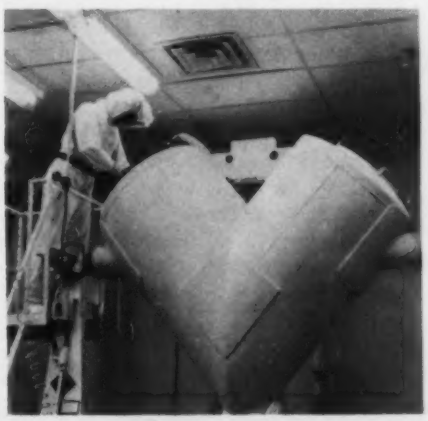
J. P. O'Sullivan and R. P. Wilding, "Liver Hamartomas in Patients on Oral Contraceptives," *British Medical Journal*, **3**:7, 1974.

Government Policies Can Avert Economic Stagnation when Population Growth Ends

What effect will a stable population, with no growth, have on the nation's economy? The answer depends on what economic policies are adopted by the federal government, explained Alan R. Sweezy, professor of economics at the California Institute of Technology and chairman of the board of Planned Parenthood-World Population, at the annual meeting of the Population Association of America. "Under favorable circumstances such as those which existed in the nineteenth century, population growth has a stimulating effect on investment" and, therefore, on the country's economic health in general, he noted. "It does not at all follow, however, that we should encourage population growth as a way of insuring a high level of income and employment," Sweezy added. "Not only are other means of accomplishing this objective available, but the environmental and resource implications of continued population growth are quite unacceptable."

While John Maynard Keynes predicted that declining population growth could lead to economic stagnation, the noted economist also indicated how this problem could be avoided, Sweezy explained. Keynes and others had "estimated that a large part of investment, perhaps as much as one-half, in the century preceding World War I had been associated with population growth," he noted. "But population growth in the Western World was slowing down" between the World Wars "and would soon cease. With the slow-down, investment opportunities would be relatively smaller than they had been in the past and unless appropriate changes in policy were made we would see a chronic tendency to low income and underemployment of resources. This in brief was the stagnation thesis."

The reason low or no growth would discourage investment is the classic law of diminishing returns. With places for new investment limited to those opened up by technological change (since the size of the labor force is no longer expanding), the amount of capital per worker would steadily increase. And, by the law of diminishing returns, beyond a certain point the rate of profit would begin to decline — and eventually reach a level where it is no longer worthwhile to invest. When this happens, growth begins to slow and unemployment begins to increase — in other words, economic stagnation.



The way around this stumbling block is through the intervention of government which, in effect, becomes a major investor in the economy. This is the "appropriate change in policy" required to avert stagnation, and this is the direction in which the government has been moving for several decades. "The government sector of the economy in the West, as a result both of war and of increased assumption of social responsibilities, has been a much larger part of the whole than in the past," Sweezy noted. "This has greatly reduced dependence on the flow of private investment spending in maintaining prosperity and high employment."

Source

A. R. Sweezy, "The Natural History of the Stagnation Thesis," paper presented at the annual meeting of the Population Association of America, New York City, April 20, 1974.

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Family Size

Current Low Fertility May Not Last Long

Although young wives are reporting birth expectations which, if continued, would lead eventually almost to population replacement, and although the U.S. fertility rate in 1973 was at its lowest recorded point—well below replacement—the attitudes of young people about family size and child-spacing appear to conflict with such an outcome, according to Judith Blake, professor in the Graduate School of Public Policy at the University of California at Berkeley.

The current low level of family size expectations may be temporary, spurred by "the historically unique stimulus of intense public attention to population growth and family size."

Through a series of Gallup polls, Blake found that while two children is currently the most popular "ideal" size for a family, most Americans do not object to larger families, but do have an aversion to childlessness and one-child families. "These results suggest that some conservatism in interpreting recent data on birth expectations might be wise," Blake said.

In various surveys from 1941 through 1968, a fairly consistent proportion (ranging between 21 percent and 31 percent) of white men of voting age reported an "ideal" size for a family at two children. White women exhibited a similar pattern in family size preference during these years. The sharp rise in the two-child preference began after 1968 opinion polls; and in 1972 nearly half of both men and women surveyed picked the two-child family as ideal. The average ideal family size fell from 3.3 children to 2.8 for men and from 3.4 to 2.9 for women between 1968 and 1972. The increase in preference for a two-child family was seen uniformly across all age groups.

But other findings, Blake said, are not consistent with these lowered family size preferences:

- In response to a question, ". . . what size family do you think is too large . . .?" 17 percent of white Americans in both 1970 and 1972 indicated that three children made a family "too large," and an additional 45 percent said that four or five children made a family "too large." There was little difference between those aged 18-24 and the sample as a whole. The mean number of children which the respondents felt made a family too large was the same in both the 1970 and 1972 polls, about 5.5.

These findings tend to indicate, Blake noted, that "the two-child family does not seem to be truly normative," and therefore the preference for two children "does not seem to involve such a sense of commitment that many individuals would feel greatly concerned about changing their preferences in the future." A study by Janet Griffith of The Johns Hopkins University found a similar degree of tolerance for large families to that reported by Blake. [See: "Family, Peers Apply Pressure for Kids," *Digest*, Vol. 2, No. 5, 1973, p. 7.]

In addition, Blake said, "there has been no notable increase over time in the proportions [of couples] idealizing childessness or the only child." In 1972, only two percent of both white men and women defined such families as "ideal." Blake also cited data from an August 1972 Gallup survey which showed that four-fifths of whites (slightly more women than men) thought that a one-child family was "too small."

- One-child families were felt to be a disadvantage to the child as well as the couple. In 1972, 80 percent of respondents felt that being an only child was "a disadvantage," showing essentially no change from a 1950 poll, when 76 percent of respondents felt that singletons were disadvantaged.
- In a February 1973 poll, 85 percent of white respondents said a marriage was "happier" if there were children, while only eight percent of men and six percent of women believed marriage is happier without children (with the remainder not sure). And in another survey five months earlier, the most frequent response to a question asking the respondents to select the "happiest" stage of a marriage (of four possibilities), the most common choice, in all age, religious and educational groupings, was the period "when the babies are being born and the children are very young."

"It is noteworthy that those under age 30 are the most likely to regard active reproduction as the happiest time, although this age group has the smallest family-size ideals," Blake observes. What therefore seemed curious to her was the fact that, when replying to other questions in the same survey, both male and female respondents felt the optimal time to have a first child was 2.4 years after marriage, with 2.1 years between subsequent births. If only two children are desired, a couple will end their reproductive career early in life, leading to "a disproportionately long empty-nest period"—the time when the children have left home. And this was the period of marriage which got the *least* support as being the happiest.

These various observations indicate, Blake said, that current low fertility and birth expectations may "have been influenced, on a short-term and relatively superficial basis, by antinatalist propaganda concerning family size—an influence that has not permeated to other relevant attitudes, such as those regarding large families, childnessness and the only child, or the stages of the family cycle."

Source

J. Blake, "Can We Believe Recent Data on Birth Expectations in the United States?" *Demography*, 11:25, 1974.

☆ U.S. Government Printing Office: 1973-0-734-440 DHEW Publication No. (HSA) 75-16000